

DOCUMENT RESUME

ED 300 719

CG 021 214

AUTHOR McWilliams, Jettie M.
TITLE Assessing Work-Related Stress and Teaching Coping Strategies.
PUB DATE Feb 88
NOTE 16p.; Paper presented at the Annual Meeting of the California Association for Counseling and Development (San Francisco, CA, February 26-28, 1988).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150) -- Tests/Evaluation Instruments (160)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Age Differences; Coping; *Professional Personnel; Regional Characteristics; Sex Differences; *Stress Variables; *Test Norms
IDENTIFIERS *Job Stress

ABSTRACT

Stress is a common problem in today's society. Even though stress has been recognized as a problem in the workplace, the identification of specific work-related stress producers, coping mechanisms, and symptoms has been somewhat neglected. The purpose of this study was to analyze levels and areas of stress in selected service professions and to establish norms of stress for these professions using the Tennessee Stress Scale-R (TSS-R), a work-related stress inventory for professionals. The TSS-R was administered to professionals (N=800) in education, medicine, government service, industry, business, and counseling. Results showed education professionals were significantly higher than business and government service professionals on producers and symptoms subscales. Females scored higher than males on producers and symptoms. There was a significant negative correlation between age and coping. The number of children a person had was negatively correlated with producers and copers. People with more children had lower scores on producers and copers subscales. Regional differences emerged with scores in the Western region of the country being significantly lower than scores in the East. (The TSS-R is included.) (Author/ABL)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ASSESSING WORK-RELATED STRESS AND TEACHING COPING STRATEGIES

Jettie M. McWilliams, Ed.D.

The 60 item Tennessee Stress Scale-R (TSS-R) by McWilliams is a work-related stress inventory for professionals. The final revision represents six years of research. The TSS-R provides a measure of stress in three areas: Stress Producers, Stress Coping Mechanisms, and Stress Symptoms.

The purpose of this study was (1) to analyze levels and areas of stress of professionals in selected service professions, and (2) to establish norms of stress for these professions.

The TSS-R was administered to the following groups of professionals (n=800): (1) Education, (2) Medical, (3) Government Service, (4) Industry, (5) Business, and (6) Counselors. Demographic data was included to analyze (1) gender, (2) regional or geographical differences, (3) age, and (4) number of children.

Education professionals were significantly higher than Business and Government Service on producers and symptoms subscales. Females scored higher than males on producers and symptoms. There was a significant negative correlation (p.05) between age and coping. The number of children a person has is negatively correlated with producers and copers. People with more children have lower scores on producers and copers subscales. Regional differences emerged with scores in the Western region of the country being significantly lower than Easterners (p.05).

The TSS-R is designed for use in counseling/in-service.

ED300719

CG 021214

ASSESSING WORK-RELATED STRESS AND TEACHING COPING STRATEGIES

Jettie M. McWilliams, Ed.D.

Northern Arizona University, Flagstaff, AZ

INTRODUCTION

Stress is a common problem in today's high tech society as attested to by the public's constant search for direction. Examples are the large number of unorthodox religious groups that have appeared in the past few years, and the recent proliferation of self-help books (Weiten, 1986). Moreover, stress contributes to higher levels of consumption of alcohol and prescription drugs (Glaser, 1977, House, 1981, Maslach and Jackson, 1981, Campbell, 1981).

Even though stress has been recognized as a problem in the workplace, the identification of specific work-related stress producers, coping mechanisms and symptoms has been somewhat neglected. McWilliams developed the Tennessee Stress Scale-R (TSS-R, 1984) with this in mind. The 60 item TSS-R is a work-related stress inventory for professionals. The final revision represents four years of research (McWilliams, Note 1). See Table 1. (Schnorr and McWilliams, Note 2).

The purpose of this study was (1) to analyze levels and areas of stress of professionals in selected service professions, and (2) to establish norms for the TSS-R for these professions.

PROCEDURE

The TSS-R was administered to the following groups of professionals (n=800): (1) Education, (2) Medical, (3) Government Service, (4) Industry, (5) Business, and (6) Counselors. Demographic data was included to analyze (1) gender, (2) regional or geographical differences, (3) age, and (4) number of children.

Table 1 presents the 60 items on the final revision of the TSS-R. Items 1-20 identify stress producers, items 21-40 identify stress coping mechanisms, and items 41-60 identify stress symptoms. Items 7 and 8 are considered eustress producers and are scored with the "no" response. Coping mechanisms items 26, 27, 28, 29, 32, 34, 35, 37 and 39 are considered positive and are also scored with the "no" response.

(Table 1 about here)

RESULTS

Education and medical professionals were significantly higher than business and government service professionals on producers and symptoms subscales. The breakdown of means (possible 20 on each subscale) are reported in Table 2.

(Table 2 about here)

Females had an average score of 8.46 for producers while males had a score of 7.17. With symptoms, males scored at 6.25 while females averaged 8.1.

There was a significant negative correlation (p.05) between

age and coping. The number of children a person has is negatively correlated with producers and copers. People with more children have lower scores on producers and copers subscales as well as Total Stress Score.

Regional differences emerged with scores in the Western region of the country being significantly lower on producers than Easterners (p.05). (Schnorr and McWilliams, Note 3).

DISCUSSION

Education and medical professionals indicated higher levels of stress on producers (TSS-R items 1-20) and symptoms (TSS-R items 41-60) subscales than business and government service professionals reported. It is interesting to note that the nature of the work of those in education and medical professions may contribute to these high scores; however, the education and medical professionals also appear to have more coping resources (items 21-40). Visual inspection of Figure 1 reveals that those in the counseling profession do not report as many producers or symptoms as the education and medical professionals report. It is possible that the counselors have learned to deal with problem areas and they may not perceive as much stress in the workplace.

An important finding was the negative correlation between age and coping. It appears that with age the coping resources improve. This implies that professionals learn to (1) take things in stride without perceiving the same factors as stressful as time goes on, (2) they learn to control more factors in the workplace, or (3) learn better coping strategies.

RELATED RESEARCH

A doctoral dissertation and one master's thesis using the TSS-R have been completed and are reported here. Table 3 presents stress producers scores taken from an unpublished doctoral dissertation, "Stress in Community Colleges: An Administrative Concern," by Delores Jean Staten, 1987 (Note 4). Table 4 follows with a discussion of Durelle B. Fullenkamp's unpublished master's thesis findings (Note 5).

(Table 3 about here)

Staten further corroborated earlier findings that (1) females experienced higher levels of stress producers and stress symptoms than males experienced, and (2) levels of stress appeared to go down with age.

Major Durelle B. Fullenkamp (December, 1987) completed her master's thesis entitled "Role Conflict, Role Ambiguity, and Role Strain in United States Air Force Chief Nurse Administrators," (N=80). The TSS-R was used to measure role strain. The Role Conflict and Ambiguity Questionnaire (Rizzo, House and Lutzman, 1970) was used to measure role conflict and role ambiguity. The findings are presented in Table 4.

(Table 4 about here)

Major Fullenkamp found significant negative relationships between age and role ambiguity ($p=0.001$), and age and total role strain ($p=0.003$), which supported the findings of the present study.

Fullenkamp concluded that role conflict and role ambiguity were related to total experienced role strain. Role Ambiguity was strongly related to strain coping mechanisms and role strain symptoms, while role conflict was not. She suggested that identification of eustress variables would help clarify responses to role strain.

CONCLUSIONS

McWilliams and Schnorr's, and Staten's findings that females reported greater job stress than males supports other studies in the literature (Greenglass, 1988).

All three studies reported here (McWilliams and Schnorr, Staten, and Fullenkamp) found a negative relationship between age and stress.

The results of the evaluation of work-related stress using the TSS-R should provide direction for practitioners in developing individualized training in effective coping.

SUMMARY

The Tennessee Stress Scale-R is generating a great deal of research. McWilliams and Schnorr have made presentations on the development of the TSS-R, the research, and on the possible uses of the TSS-R both nationally and internationally since 1981.

Currently, several graduate students are using the TSS-R in their research and dissertations. These findings will be reported in the psychological literature.

The TSS-R is designed for use in counseling and in planning workshops/in-service for professional groups. More normative data will be forthcoming, along with the identification of specific stress producers from a variety of work settings.

REFERENCES

- Campbell, A. (1981). The sense of well-being in America: Recent patterns and trends. New York: McGraw-Hill.
- Glaser, M. (1984). Rx activity solid despite new products trickle: 45th annual prescription survey. Drug topics, 128 (6), 28-42.
- Glass, D. (1977). Behavior patterns, stress, and coronary disease. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Greenglass, E. (1988). Type A behavior and coping strategies in female and male supervisors. Applied Psychology: An International Review, 37, 271-288.
- House, J.S. (1981). Work, stress, and social support. Reading, MA: Addison-Wesley.
- Meslach, C., & Jackson, S.F. (1981). The measurement of experienced burnout. Journal of Occupational Behavior, 2, 99-113.
- Weiten, W. (1986). Psychology applied to modern life, 2nd edition. Monterey, CA: Brooks-Cole.

REFERENCE NOTES

1. McWilliams, J.M. (1985). Stress levels of professionals. Unpublished paper presented at the XXXIII International Congress of Psychology, Acapulco, Mexico, (August).
2. Schnorr, J. and McWilliams, J.M. (1988). Evaluation of stress levels of professionals. Unpublished paper presented at XXIV International Congress of Psychology, Sydney, Australia, (September).
3. Schnorr, J. and McWilliams, J.M. (1987). Assessing stress levels of professionals with the TSS-R. Unpublished paper presented at Midwestern Psychological Association Conference, Chicago, IL, (May).
4. Staten, J. (1987). Stress in community colleges: An administrative concern. Unpublished doctoral dissertation.
5. Fullenkamp, D.B. (1987). Role conflict, role ambiguity, and role strain in United States Air Force chief nurse administrators. Unpublished master's thesis.

Table 1

TENNESSEE STRESS SCALE-R

Work Related Stress Inventory for Professionals

Jettie M. McWilliams, Ed.D.

Directions:

This inventory contains statements dealing with stress that are related to your work. Please read each statement carefully and respond as it usually relates to you. Mark your answers under the columns headed "Yes" or "No".

STRESS SCORE

Stress (P) _____
 Stress (C) _____
 Stress (S) _____
 Total _____

	YES	NO
1. I compare my job performance with others in my organization	()	()
2. I take on more responsibility to prove I am as capable as others	()	()
3. I am overly critical of my performance in my job responsibilities	()	()
4. I feel my subordinates resent my authority ...	()	()
5. My position forced me to develop a more forceful-aggressive role	()	()
6. I assume a nurturing leadership role	()	()
7. Higher levels of administration reinforce me for my work	()	()
8. My colleagues express sufficient appreciation for my hard work done in their behalf	()	()
9. Meeting constant deadlines at work causes me stress	()	()

10. I feel vulnerable in my work in that my willingness to take high risk tasks may backfire () ()
11. My personal limitations on the job cause me stress () ()
12. The idea that I'm not O.K., learned from childhood experiences, affects my professional competencies () ()
13. I feel that no matter how hard I try at work, I will not receive the recognition I deserve () ()
14. My professional colleagues assume that I will take a passive leadership role () ()
15. The frequency of interruptions while performing job tasks causes me frustration constantly () ()
16. My position makes me feel socially isolated .. () ()
17. Unclear job responsibilities cause me undue stress () ()
18. I lack experience in major decision-making responsibilities () ()
19. Being placed in a leadership role without authority creates a problem for me () ()
20. I underestimate my skills and abilities () ()
21. When I experience stress at work, I set realistic expectations for myself () ()
22. When work becomes difficult, I feel I have "fallen short" () ()
23. When I am under pressure at work, I express more hostility () ()
24. When I am under stress, I am more impatient with others () ()
25. When I am stressed, I avoid job tasks which are frustrating () ()
26. When I have work pressures, I am able to transcend my stress by seeing the humorous aspects and laugh () ()
27. When I am under stress at work, I take time for myself () ()
28. When work pressures increase, I make it a point to get sufficient amounts of rest and sleep () ()

29. When under stress, I exercise regularly () ()
30. When I am under stress at work, I become more depressed and withdrawn () ()
31. When pressure is great at work, I find that my interpersonal relationships deteriorate () ()
32. When under stress at work, I turn problems into opportunities () ()
33. When things are stressful at work, I over react to criticism () ()
34. When work is stressful, I am able to identify factors that cause me stress () ()
35. When personal conflicts arise, I prefer to directly confront people () ()
36. When problems arise, I tend to blame others .. () ()
37. When under pressure, I accomplish more () ()
38. When under stress, I seek support or advice from a close friend () ()
39. When difficulties arise, I allow time to resolve the issue () ()
40. When under stress, I find a cocktail before dinner is relaxing () ()

When work is stressful, I have experienced the following:

41. High blood pressure () ()
42. Excessive smoking () ()
43. Skin irritations () ()
44. Decrease in sexual interest () ()
45. Diarrhea () ()
46. Weight gain () ()
47. Nausea () ()
48. Weight loss () ()
49. Nervousness () ()
50. Fatigue () ()

51. Stomach pains	() ()
52. Ulcers	() ()
53. Headaches	() ()
54. Backaches	() ()
55. Pain or discomfort which is medically undiagnosed	() ()
56. Tightness or soreness of muscles	() ()
57. Professional burnout	() ()
58. Allergies	() ()
59. Sleep problems	() ()
60. Irritability toward others	() ()

Table 2

TSS-R Means for Selected Professionals			
n=800	Producers	Copers	Symptoms
	$\bar{X}$	$\bar{X}$	$\bar{X}$
Education	8.9	8.2	8.3
Medical	9.4	8.3	8.2
Counselors	7.7	7.7	7.7
Business	6.0	7.1	7.0
Government	5.5	7.4	6.0
Industry	7.5	6.0	6.0

Table 3

*Levels of Stress Producers Experienced by Community
College Administrators

N=407		TSS-R Stress Producers Score		
		Mild	Moderate	Severe
		(0-5)	(6-11)	(12-20)
M=6.472	S.D.=3.672			
Number of Administrators		189 (46%)	166 (41%)	52 (13%)

*Staten, 1987.

Table 4

*Relationships Between Role Strain and Role Conflict
And Between Role Strain and Role Ambiguity
(N=80)

ROLE STRAIN (TSS-R)	ROLE CONFLICT	ROLE AMBIGUITY
Producers	< 0.001	<0.001
Coping Mechanisms	0.123	<0.001
Symptoms	0.175	0.001
Total Role Strain	0.007	<0.001

*Fullenkamp, 1987.